Amendments to the Claims:

The following listing of claims replaces all prior versions and listings of claims in the present application.

1. (Currently Amended) A method ~~facilitating remote deployment of network devices~~, comprising:

~~monitoring, at a network device operating in an unconfigured network address mode, for a configuration message, wherein the configuration message includes information sufficient for an initial automated remote deployment of the network device, including an internet protocol (IP) address for the network device and an IP address for a remote network management system, wherein the network device is disposed on a communications path between a first network and a second network, and wherein the configuration message is transmitted from a remote device on the first network and addressed to a destination host on the second network;~~

~~forwarding, in the unconfigured network address mode, all packets received at the network device, other than configuration messages, along the communications path;~~

~~upon detection of the configuration message, configuring the network device with the IP address for the network device in the configuration message; and~~

monitoring, at a network device disposed on a communication path between a first network and a second network and operating in an unconfigured mode, messages transmitted from the first network to the second network;

upon detecting at the network device a message transmitted from the first network to the second network, determining whether the message is a configuration message based on whether the message is a null service type Resource ReSerVation Protocol (RSVP) message;

if the message is not a configuration message, then forwarding, at the network device, the message to the second network;

if the message is a configuration message that comprises an Internet Protocol (IP) address for the network device and an IP address of a network management system disposed in the first network, then configuring, at the network device, the network device with the IP address for the network device; and

switching the network device to a configured mode.

2. (Currently Amended)   The method of claim 1, further comprising:

transmitting, from the network device, a ~~message~~ configuration request to the ~~remote~~ network management system using the IP address of the network management system in the configuration message.

3. (Cancelled)

4. (Currently Amended)   The method of claim 2, wherein ~~the transmitting step comprises~~ wherein the configuration message further comprises a password for the network management system, further comprising:

~~initiating~~ establishing a connection ~~to~~ between the network device and the ~~remote~~ network management system using the password.

5. (Currently Amended)   The method of claim [[1]], 4 further comprising:

receiving, at the network device, additional configuration information from the ~~remote~~ network management system; and

further configuring, at the network device, the network device with the additional configuration information.

6. (Cancelled)

7. (Currently Amended)   The method of claim 1, wherein the configuration message further comprises a time stamp, further comprising:

validating, at the network device, the configuration message based on the time stamp before ~~the~~ configuring ~~step~~ the network device.

8. (Cancelled)

9. (Currently Amended)   A method ~~facilitating remote deployment and configuration of a network device physically installed on a first network, wherein the network device is initially unconfigured and operative to intercept configuration messages~~, comprising:

composing a configuration message ~~including configuration information corresponding to the network device~~, wherein the configuration ~~information~~ message is a null service type Resource ReSerVation (RSVP) message and comprises configuration information that comprises an internet protocol (IP) address for ~~the~~ a null-service-enabled network device disposed on a communication path between a first network and a second network and operating in an unconfigured mode and an IP address for a ~~remote~~ network management system disposed in the second network; and

transmitting ~~from a second network a configuration message to a destination host in the first network, wherein the network device is disposed on the communications path between the second network and the destination host~~ the configuration message from the second network to the first network.

10. (Currently Amended)   The method of claim 9, further comprising:

~~repeating the~~ repeatedly transmitting the configuration message until a response to the configuration message is received from the network device.

11. (Currently Amended)   The method of claim 9, wherein the configuration information further comprises information sufficient for the network device to establish a network connection with the network management system.

12. (Currently Amended)   The method of claim 9, wherein the configuration ~~message~~ information further comprises a sub-network mask for the first network, and [[the]] a network address of [[the]] a gateway router corresponding to the first network.

13. (Currently Amended)   The method of claim [[11]] 9, wherein the configuration information further ~~includes~~ comprises a cryptographic digest of the configuration information.

14. (Currently Amended)   The method of claim 13, wherein the configuration information is encrypted with an encryption key.

15. (Currently Amended)   The method of claim 14, wherein the encryption key comprises a secret string of text.

16. (Currently Amended)   The method of claim 15, wherein the encryption key further comprises a random number.

17. (Currently Amended)   The method of claim 16, wherein <u>the configuration message is transmitted from the network management system to a network node that is disposed in the first network, configured, and known to the network management system and</u> the encryption key further comprises [[the]] <u>an</u> network address of the ~~destination host~~ <u>network node</u>.

18. (Currently Amended)   The method of claim 15, wherein the network device is ~~pre-configured~~ <u>preconfigured</u> with the secret string of text.

19. (Currently Amended)   The method of claim 14, wherein the encryption key is a symmetric encryption key.

20. (Currently Amended)   The method of claim 14, wherein the encryption key is a private encryption key, and ~~wherein~~ the configuration information is encrypted using an asymmetric encryption algorithm.

21. (Currently Amended)   The method of claim 20, wherein the network device is preconfigured with an encryption key corresponding to the private encryption key.

22. (Currently Amended)   The method of claim 19, wherein the symmetric encryption key is encrypted using an asymmetric encryption algorithm with a private encryption key.

23. (Currently Amended)   The method of claim 22, wherein the network device is preconfigured with an encryption key corresponding to the private encryption key.

24. (Currently Amended) A method ~~facilitating remote deployment of network devices~~, comprising:

~~monitoring, at a network device in an unconfigured mode, for a configuration message transmitted by a network management system, wherein the configuration message includes configuration information for the network device, wherein the network device is disposed on a communications path between a first network and a second network, and wherein the configuration message is transmitted from a remote device on the first network and addressed to a destination host on the second network;~~

~~after detection of a configuration message, validating the configuration message;~~

~~if the configuration message is valid, configuring the network device using the configuration information in the configuration message;~~

~~if the configuration message is not valid, forwarding the configuration message along the communications path; and~~

~~forwarding all messages other than configuration messages received at the network device along the communications path.~~

monitoring, at a network device disposed on a communication path between a first network and a second network and operating in an unconfigured mode, messages transmitted from the first network to the second network;

upon detecting a message transmitted from the first network to the second network at the network device, determining whether the message is a configuration message based on whether the message is a null service type Resource ReSerVation Protocol (RSVP) message;

if the message is not a configuration message, then forwarding, at the network device, the message to the second network; and

if the message is a configuration message that comprises configuration information for the network device, then

validating the configuration message,

if the configuration message is valid, then configuring the network device using the configuration information, and

if the configuration mess is invalid, then forwarding, at the network device, the configuration message to the second network.

25. (Currently Amended)   The method of claim 24, wherein the configuration message ~~includes~~ comprises configuration information sufficient for the network device to establish a network connection to a network management device disposed in the first network.

26-27. (Cancelled)

28. (Currently Amended)   The method of claim [[24]] 25, wherein the configuration information comprises a network address for the network device, and a network address corresponding to the network management ~~system~~ device.

29. (Currently Amended)   The method of claim 24, wherein the configuration information ~~in the configuration message~~ is encrypted.

30. (Currently Amended)   The method of claim 24, wherein

~~the network device is operably connected to a~~ the first network ~~comprising~~ comprises a gateway router having a gateway network address;

the network device is operably connected to the first network;

~~wherein the configuration information in~~ the configuration message further comprises [[the]] a network address ~~of a gateway router~~; and

~~wherein the~~ validating ~~step~~ the configuration message comprises determining whether the network address ~~of the gateway router~~ matches the gateway network address of the gateway router.

31. (Currently Amended)   The method of claim [[24]] 28, ~~wherein the determining step comprises~~ further comprising broadcasting an address resolution protocol request, including the network address for the network device and the network address corresponding to the network management device ~~in the configuration message~~, on the network.

32. (Currently Amended)   The method of claim 24, wherein the network device comprises a first network interface and a second network interface, and monitoring ~~step,~~ at the network device, the messages transmitted from the first network to the second network comprises:

intercepting, at [[a]] the first network interface, a ~~configuration~~ message transmitted ~~by a network management system~~ from the first network to the second network; and

if the message is not a configuration message, then passing ~~other packets to a~~ the message to the second network interface for forwarding ~~along the communications path~~ to the second network.

33. (Currently Amended)   The method of claim 24, wherein the configuration information in the configuration message is encrypted, and ~~wherein the~~ validating ~~step~~ the configuration message comprises decrypting the configuration information.

34. (Currently Amended)   A method ~~facilitating remote deployment of network devices~~, comprising:

receiving, at a first network interface of a network device ~~in an unconfigured state~~ disposed on a communication path between a first network and a second network and operating in an unconfigured mode, a configuration message transmitted ~~by a network management system, wherein the configuration message includes configuration information for the network device, wherein the first network interface and a second network interface of the network device are operably connected to a communications path between a first network and a second network~~ transmitted from the first network to the second network, wherein

the network device comprises the first network interface and a second network interface,

the network device is operably connected to the first network via the first network interface,

the network device is operably connected to the second network via the second network interface,

the network device is null-service-enabled,

the configuration message is a null service type Resource ReSerVation Protocol (RSVP) message, and

the configuration message comprises configuration information for the network device;

~~after detection of a configuration message,~~ validating, at the network device, the configuration message;

if the configuration message is valid, <u>then</u> configuring the network device using the configuration information in the configuration message; <u>and</u>

if the configuration message is not valid, <u>then</u> passing the configuration message to the second network interface for forwarding ~~along the communications path~~ to the second network.~~;~~ ~~and~~

~~passing packets other than configuration messages received at the first network interface to the second network interface for forwarding along the communications path.~~

35. (Currently Amended)   The method of claim 34<u>,</u> wherein the configuration information ~~includes the~~ <u>further comprises a</u> network address of a network management system <u>disposed in the first network,</u> and ~~wherein~~ the method further comprises<u>:</u>

establishing a connection to the network management system using the network address ~~in the configuration information~~ <u>of the network management system</u>.

36. (Currently Amended)   A network device ~~allowing for automated, remote deployment,~~ comprising<u>:</u>

~~first and second network interfaces, each operative to transmit and receive packets over a computer network;~~

<u>a first network interface;</u>

<u>a second network interface;</u>

a processor;

a configuration interface module comprising computer-readable instructions operative to cause the processor to configure the network device based on received configuration information; and

a configuration daemon comprising computer-readable instructions operative to cause the processor<u>,</u> <u>the first network interface,</u> and the <u>second</u> network device~~, when the network device is an unconfigured state,~~ to<u>:</u>

receive, at the first network interface, a configuration message transmitted <u>from a first network to a second network</u> by a network management system <u>disposed in the first network</u>

and addressed to a configured destination host having a network address disposed in the second network, wherein the network device is disposed on a communication path between the first network and the second network;

validate the configuration message;

if the configuration message is valid, then invoke the configuration interface module to configure the network device using configuration information in the configuration message, if the configuration message is valid; and

~~pass,~~ if the configuration message is not valid, then pass the configuration message to the second network interface for forwarding ~~along a communications path; and pass packets other than configuration messages received at the first network interface to the second network interface for forwarding along the communications path~~ to the destination host.

37. (Cancelled)

38. (Currently Amended)   The network device of claim 36, wherein the configuration interface module is operative to configure the network device to communicate with the network management system using the configuration information in the configuration message.

39-40. (Cancelled)

41. (Currently Amended)   In a network environment comprising a first network, ~~and~~ a second network, and a network device disposed on a communication path between the first network and the second network, wherein the first network includes a gateway router allowing access to resources on at least the second network, and the network device, when operating in an unconfigured mode, is capable of intercepting messages transmitted from the second network to the first network, a method, ~~facilitating remote configuration of a network device physically installed on the first network, the method~~ comprising:

identifying a destination host on the first network, wherein ~~an unconfigured network device is disposed on the communications path between the gateway router and the network device, wherein the network device is operative, in an unconfigured mode, to intercept configuration messages~~ the destination host is configured, has a network address, and is

accessible to the resources on at least the second network, and the network device is underlined unconfigured and inaccessible to the resources on at least the second network;

transmitting a configuration message from the second network to the first network, wherein the configuration message is addressed to the destination host, and is used for automatically configuring the network device after being intercepted by the network device.

42. (Currently Amended)   The method of claim 41, wherein the configuration message is formatted in a manner that causes the destination host to ignore the configuration message.

43. (Currently Amended)   The method of claim 41, wherein the configuration message is formatted in a manner that causes the destination host to discard the configuration message.

44. (Currently Amended)   The method of claim 41, wherein the configuration message is formatted according to a protocol that is not implemented by the destination host.

45. (Currently Amended)   The method of claim 41, wherein the configuration message is formatted according to a protocol that is not understood by the destination host.

46. (Currently Amended)   The method of claim 41, wherein the configuration message includes comprises information sufficient for the network device to establish a network connection with a remote device on the second network.

47. (Currently Amended)   The method of claim 46, wherein the configuration message includes further comprises a network address for the network device, a sub-network mask [[for]] of the first network, a network address [[for]] of the remote device on the second network, and [[the]] a network address of the gateway router.

48. (Currently Amended)   A method facilitating remote, automated deployment of a network device on a network, comprising:

establishing, in an unconfigured mode, a connection with a remote device for configuration information;

providing, during the connection, a hardware profile <u>that describes a hardware architecture and an operating system</u> of [[a]] <u>the</u> network device;

receiving configuration information from the remote device based <u>at least in part</u> on the hardware profile.

49. (Currently Amended)   The method of claim 48<u>,</u> further comprising obtaining a network address before the establishing step.

50. (Currently Amended)   The method of claim 49<u>,</u> wherein the network address is a dynamic IP address obtained from a DHCP server.

51. (Currently Amended)   The method of claim 48<u>,</u> further comprising<u>:</u>

gathering network topology information characterizing the topology of the network to which the network device is attached; and

providing the network topology information to the remote device; and

wherein the configuration information received from the remote device is <u>further</u> based on <s>the hardware profile and</s> the network topology information.

52. (Currently Amended)   The method of claim 51<u>,</u> wherein the network topology information comprises information concerning at least one host neighboring the network device.

53. (Currently Amended)   The method of claim 51<u>,</u> wherein the network topology information comprises the subnetworks accessible to the network device.

54. (Currently Amended)   The method of claim 48<u>,</u> wherein the establishing step is performed in response to the receipt of a configuration message transmitted by the remote device.

55. (Currently Amended)   The method of claim 54<u>,</u> wherein the configuration message is addressed to the broadcast address of the network.

56. (Currently Amended)   The method of claim 50, wherein the network comprises a DHCP server operative to provide the network address of the remote device in a field associated with a DHCP response transmitted to the network device.

57. (Currently Amended)   The method of claim 48, wherein a second network device connected to the network is operative to broadcast the network address of the remote device.

58. (Currently Amended)   The method of claim 48, wherein the network comprises a second network device operative to transmit the network address of the remote device in response to a request; and wherein the method further comprises broadcasting a request for the network address of the remote device.